Climate Protection and Green Economy
Meeting Date: 16 September 2009
Discussion Notes

INTRODUCTION

Group expectations (Bowles)
By statute, setting the target for 2020 is the responsibility of EEA, and EEA needs input on design of policies to meet both the 2020 goal and the goal of 80% reduction by 2050 while growing the clean energy economy and doing so at least cost. What do and don't you want to see and why. What has been helpful and not. Transportation agencies are undergoing major changes, GHG is part of their mandate now – a huge opportunity.

There was concern expressed about how to select policies without a sense of what the target will be. Long term target is very aggressive and that's what we should consider as we review policies.

Should the committee consider an entire suite and then allow EEA to select?
Yes. We would ask AC members to talk to and engage your different constituencies. The Green Economy goal is itself a very aggressive goal, for us to concentrate on, will look for advice on that especially.

Will there be a milestone for this committee to submit a report by a certain date?
For the committee to decide.

We will take this discussion and frame it into clear expectations of the committee and send it to AC members.

ANALYSIS OF EXISTING GHG POLICIES (Cash)

EEA is contracting an outside modeling consultant and tasking state agency personnel to examine GHG reduction benefits of this lists, costs and distribution, jobs and economy implications. (EEA, EOT, EOHED)

We need a clear expectation for what our existing policies will accomplish in terms of GHG reduction.

CONTEXT FOR DEVELOPING THE 2020 TARGET AND REDUCTION PLAN (Cash)

Underlying guidepost is 80% by 2050
Twin goals: reducing GHG emissions and clean energy economy.
These will be harder to accomplish in this challenging economic context and with budget shortfalls.
Reorganization of Transportation agencies: GWSA is now an explicit priority
Federal level executive changes and legislative initiatives
International – Copenhagen Dec 2009
Challenge of developing clean energy economy is expressed well in T Friedman article today.

Science is changing in that we progressively see results heading in a more alarming direction – let's keep science front and center. With a lot of our focus on the business community – in this state – we have wealth of academic and research science can be a helpful driver.
Let's consider the cost of inaction. Harmful impacts through the economy of climate change already occurring.

Information and science that everyone can understand is important – major disconnect between science and pubic understanding – perhaps can be addressed through subcommittee on education/communication.

DISCUSSION OF CROSS CUTTING THEMES (Avery, Madaus)

Add to the list the two new ideas for cross cutting themes of
EDUCATION/ OUTREACH/COMMUNICATION
ADAPTATION/MITIGATION

First discuss process for this work. In the phone calls made to AC members there was a call for subcommittees.

Need a sense of the timeline?
Jan CPGEAC meeting: present GHG analysis for existing policies and first report out from subcommittees
Jan 1 2011 is the statutory deadline for emissions target and plan. Development plan for emissions target and reduction plan is under development and hinges on output of model that is currently out to bid.
We envision day-long working meeting with AC to look at results/output of model at some point in the future for in-depth analysis and prioritization. We will need to develop criteria for selecting policies.

We will sketch out the remaining 10 months at January AC meeting.

In November Chairs, will be in touch with conveners of subcommittees

What about public process? Transparency and public involvement is key.

If are not going to develop a target but instead a suite of options then also suggest we present/discuss the pros and cons, costs and benefits.
Quantification of options is a challenge – not all lend themselves to quantification.
Need common "point system". Need to include criteria other than the potential to reduce GHG.

Need to focus on 2050 as well as 2020 and that must be informed by science.

It will be difficult to advise on policies until we know what we have with existing policies. It is hard to know how to give specific suggestions that will cover the difference between what we have in place and the target.
Request is to have subcommittees develop suggestions on these themes (of e.g. market-based approaches) and to discuss how they should be considered for specific sectoral areas.

How do we deal with the question of whether particular recommendations will be supported by legislature
Subcommittee should note if this seems to be a significant issue.
Subcommittee members will not be asked to testify for example – at this point. It may be a request in the future, once the secretary has selected policies for plan.

It would help to understand the reductions that are potentially achievable by each policy area. It seems you are looking for baseline science, technology, resource feasibility for policy strategies. An alternative is to organize subcommittees around sectors.
Proposal to move in this direction seemed useful given our goals for clean energy economy transformation. We can revisit question of how to organize.

Breakdown by sector is fairly simple: transportation, electricity, other. Precision is not as important as focusing on major areas i.e. VMT.

EEA would like agreement on these themes for the subcommittees and want to assign members to the subcommittees.

<u>Market-based approaches</u>

No discussion.

<u>Capital markets and financing models</u>
"Valley's of Death" for business:

1. One idea for this area is to look at funding for research that is not ready for VC. This gulf is common in tech transfer and is an important barrier to developing new technology – would like this added to this group's discussion.

2. Scale-up for commercialization is also a place that isn't supported by current financial structures. This challenge can make businesses ignore the first one.

We need to better align our research $ to goals we need to achieve.

Biotech did establish some good models for overcoming 1st valley of death.

There is very little research expenditure for energy relative to health care. Need more research $$ in this area.

We need to figure out how to keep the businesses here, as well. Forge connection with MOBD and tax policy.

Financing energy efficiency is a challenge in Boston and the state. Structure of RE industry (RITs) is an issue; how to change policies at state and fed level to encourage provide incentives to large property owners with big carbon footprints to make these investments. First cost is a central problem for publicly traded entities.
Two different problems being discussed her:

1. Business development – valleys of death.
2. Investment and financing.

Group 7 may be the better place for first category of issues regarding barriers to business development.

Property assessed clean energy bonds are in use in other states. They enable innovative financing. Berkley, Babylon NY, 12-15 munis nationwide
We have legislation on this pending in MA now.

These issues may be better tackled within subject matter area i.e. buildings. Several members think these issues will be better surfaced in discussions that are organized by sectors and then these themes would be used to drive the agenda and results.

Question the ability to take on 9 subcommittees.

PV organizing principal became "reduce, replace, and reconfigure". Measures for "reconfigure" are still developing, there is no catalogue – transportation is example, a lot of this is path finding, there will be errors.

<u>Prosperity, productivity and cost-cutting</u>

Limited income households, equity? This comes into play in all sectors. This is the crosscutting theme of crosscutting themes. The package of policies must address the disproportionate impacts likely to occur and the benefits. Weatherization is good example.

Boston targets economic stimulus $ connecting investments to job creation. Boston identifies barriers like vehicle ownership and builds programs around or to address them.

Political equity is important; cost of living in city center is high.

Financing also important here, energy related repairs must be done prior to or along with energy efficiency improvements. Particularly for income groups just above those that do qualify for this kind of money.

Community based outreach should be linked to organizations that already exist there and should be delivered in language used there.

Status and role of state's EJ Policy? EEA is responsible for this, Cash is lead.

We should be very ambitious on this area. Think comprehensively, 2 m homes? Think of that as the building stock all with budgets – how we overhaul all of these buildings, over time. Weatherization is easy step one, how do we make sure that auditors coming in can do highly informed farsighted audit that gives owners a game plan that explains the costs and assistance available and knows the state of the art technology.

AC can help by quantifying, clarifying suite of policies for specific goals (X number of homes weatherized) and identifying the accompanying issues (jobs, etc) (DC on process)

<u>Land and Oceans Use planning</u>

There is significant overlap here with adaptation work, especially in coastal areas.

Suggest we combine members from both Advisory Committees on this.

The state has big role (understated in the discussion document) in terms of $ contributed by government that drive development. State should prioritize investments toward low carbon projects.

Can committee develop recommendations for capital funding that takes climate into account?

This theme is a mix of strategy and sector approach would like this subject matter combined with transportation. Agreed, we should look at land use and transportation

Transformational Business Models

One can install solar without owning it – good example of a transformational business model that is a solution to a weatherization barrier.

Lab to Market

No additional discussion.

Need to have subcommittees that are more understandable on the face of them but these themes will cut across them all. (several made this point)

Education/Outreach/ Communication

Public process throughout state is very important especially in communities that do not think of themselves as being "climate' stakeholders for education, listening, and input.
Need to develop Communication or Engagement strategy and plan. This can only work if people are engaged and understand their behavior will make an impact and is needed in addition to incentives and requirements.

Need to use very simple direct language. The list of existing policies is much dispersed and doesn't communicate clear direction.

Enhance literacy around energy use

NY is doing community outreach that is educating the general public but also creating buy-in. National Grid is seeing former naysayers becoming advocates.

"Outreach" suggests we own it; we need to engender "ownership" by the public. Consider use of community access TV for ongoing communication, not just pulses. Need to also put in play the idea of "sufficiency".

The City of Boston combines its work on mitigation and adaptation and also pulled together a community advisory committee to give feedback on recommendations and to develop the community engagement strategy. Understanding the consequences of climate change is a key concept that made

a difference in this group. Boston has already learned some lessons on language, message etc that can help here for behavior change.

Need to think about engagement till 2050 and beyond. We need to generate excitement! Make it cool to be energy efficient they way it is to recycle. This must be twice as exciting as recycling ever was.

Examples of what we each have done personally would be powerful in our communication work.

Need to create a sense of urgency but in a simplified manner. Return on investment is a motivating factor (e.g. building rating factors). Need to keep policies simple

Joint Mitigation/Adaptation

No additional discussion.

SUBCOMMITTEE DISCUSSION

There is broad agreement to design subcommittees around sectors.

DC proposed these subcommittees:

1. Transportation and Land Use
2. Buildings
3. Low Carbon Energy Supply
4. Industrial Energy and Processes
5. Waste and Materials Management
6. Forest, Agriculture, Land-Use
7. Economy-Wide
8. Two-way Communication Strategy
9. Mitigation/Adaptation Linkages

With this charge:

1. Each subcommittee will look at all crosscutting themes.
2. Each subcommittee will develop criteria e.g. cost, equity, feasibility, jobs, other co-benefits and costs.
3. Question. Should each subcommittee look at adaptation linkages? Or do we want a separate subcommittee?

Rename #5 to Waste and Materials Reduction. Lots of recycling is not necessarily a good thing if more materials are being consumed overall.

Materials life cycle management is the way to look at this; less materials being consumed.

Reducing waste isn't necessarily the goal if the waste stream is used as an input to an industrial process that is creating energy and clean water.

Concern with number of committees and suggest combining Industrial with Materials. Combine Forest, Ag with Transportation and Land use. Eliminate Mitigation/Adaptation and handle adaptation in all committees.

Need to hold Transportation separate because it is so big.

All of this subcommittee work should consider what is happening in other states and nations; this is part of the GWSA Mandate.

Final list of subcommittees (with minor subsequent changes from EEA):

1. Transportation and Land Use Planning
2. Buildings Energy Efficiency (residential, commercial, industrial) (all fuels)
3. Low Carbon Energy Supply (includes bedrock sequestration)
4. Industrial Processes, Materials & Waste Reduction and Management
5. Forest, Agriculture, Marine and Land-Use Change
6. Two-way Communication Strategy
7. Economy-Wide and Workforce (includes financing)

We will figure out another structure to examine the overlap between adaptation/mitigation.